

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## PATENT APPLICATION

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ENTITLED :                   PROCESS FOR MODIFYING THE PROPERTIES OF A  
                  THIN LAYER AND SUBSTRATE APPLYING SAID PROCESS

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## ABSTRACT OF THE DISCLOSURE

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The invention relates to a process for modifying the properties of a thin layer (1) formed on the surface of a support (2) forming a substrate (3) utilised in the field of microelectronics, nanoelectronics or microtechnology, nanotechnology, characterised in that it consists of:

- forming at least one thin layer (1) on a nanostructured support with specific upper surface (2),
- and treating the nanostructured support with specific upper surface (2) to generate internal strains in the support causing its deformation at least in the plane of the thin layer so as to ensure corresponding deformation of the thin layer to modify its properties.